

# Umetco Minerals Corporation



PO BOX 579 4625 ROYAL AVENUE • NIAGARA FALLS NEW YORK 14302

February 7, 1986

Mr. George Kasyk  
New York State Department of Labor  
69th Floor  
Two World Trade Center  
New York, NY 10047

Copy. Mr R F Kelly

Subject Request for Termination of Radioactive Materials License No 210-0090

Dear Mr Kasyk

On behalf of Umetco Minerals Corporation I am requesting that Radioactive Materials License No 210-0090 be terminated. The sources listed on the license as well as other radioactive material described below have been removed from the Technology site and have been disposed of in an approved fashion. Documentation of the disposal, together with the results of "wipe" tests by a qualified organization are appended.

The sources listed on License No. 210-0090 are

Two Cesium 137	Sealed source units - not to exceed 50 millicuries of Cesium 137 (each) Industrial Nucleonic Corporation Model S-6	
One Cadmium 109	Sealed source (Amersham/Searle Model CUC 2, 3, or 4)	3 millicuries
One Iron 55	Sealed Source (Amersham/Searle Dwg No SS/SK/450)	20 millicuries
One Cobalt 57	Sealed Source (Amersham/Searle Model CTC or CTC-3)	1 millicurie
One Plutonium 238	Sealed Source (Amersham/Searle Model PPC 2, 4 or 5)	30 millicuries

The other radioactive materials were "an unknown quantity of radium source" reported to Mr Robert Kelly of your Buffalo Office in a letter from R J Klotzbach, April 18, 1984, an Alphatron Gauge, about 3-1/2 pounds of thorium chemicals, four (4) 3-1/2 x 1-3/4" fused Thorium Oxide crucibles, and an Alnor dewpointer.

BLIND COPIES T.J. Kagetsu F.V. McMillen D.G. Millenbruch R.L. Miller C.T. Wentzel

File 2 of 3

UCCNHT0003466

Details of disposal are summarized below.

DISPOSAL OF RADIOACTIVE MATERIALS

<u>Radioactive Source</u>	<u>Disposal</u>	<u>Broker or Manufacturer</u>	<u>Packaged By</u>	<u>Carrier</u>	<u>Date</u>
(2) CS 137	Nuclear Res Warrington, PA	Accuray (Manufacturer)	C. Kolodjeski (Accuray)	Smith Transfer	10/17/85
Alnor Dewpointer	Alnor Inst Co Skokie, IL (Manufacturer)		A Gonas (Umetco)	U P S	12/6/85
Cd 109 Co 57 Fe 55 Pu 238	Amersham (Manufacturer)		F Susterick (Amersham)	Federal Express	12/10/85
Thorium Oxide(1/2#) Nitrate(2#) Chloride(1#) (4) Thorium Crucibles - 3-1/2" x 1-3/4" Alphatron Gauge Radium Source	US Ecology Richland, WA	Chem Nuclear (Broker)	J Bender (Chem Nuclear)	Consolidated Freightways	12/31/85

Documentation of receipt of the radioactive materials is appended

Results of smear tests (7/1/85) taken on the sealed sources showed they were not leaking as of that date (copy appended.)

Mr. Robert Hamner, acting radiation officer for Elkem Metals, verified in a survey completed February 3, 1986 that the locked cabinet in which the radioactive sources and thorium chemicals were stored was free of radioactivity. A letter to me attesting to this is also appended.

As I informed the Department of Labor in a letter to Dr. F. J. Bradley, January 31, 1986, Umetco Minerals is to be sold; closing date is targeted for March 31, 1986. I will be retiring about that time - If you need any more information to proceed with termination of Radioactive Material License No. 210-0090 please contact me as soon as possible.

Thank you for your attention to this request.

Very truly yours,



D. J. Hansen  
Assistant Director-Technology

mau/322h  
Attachments

UCCNHT0003467

NUCLEAR  
RESEARCH  
CORPORATION



125 Titus Avenue  
Warrington Pa 18976  
Phone 215 343 5900

Cs -137

October 25, 1985

RECEIVED

OCT 28 1985

HANSEN

Umetco Minerals Corporation  
Technology Department  
P. O. Box 579  
Niagara Falls, NY 14302

ATTENTION DR. D. J. HANSEN

SUBJECT RECEIPT OF RADIATION SOURCES  
UMETCO P O. #615-301927  
NRC JOB #83221

Dear Dr Hansen

This is to acknowledge that Nuclear Research Corporation has received the following sources from Umetco Minerals Corporation, Niagara Falls, New York under U S NRC License Nos 37-02401-01 and 37-02401-04G

SOURCE S/N	MODEL	ISOTOPE	ACTIVITY	DATE RECEIVED
CS2225	LS101-S6	Cs-137	50 mCi	10/21/85
CS2243	LS101-S6	Cs-137	50 mCi	10/21/85

Should you have any questions, please do not hesitate to get in touch with us

Sincerely,

NUCLEAR RESEARCH CORPORATION

T. W. Schwader  
Ass't Radiation Safety Officer

ma

UCCNHT0003468

SMITH TRANSFER

Carrier's No. \_\_\_\_\_

Name of Carrier

RECEIVED subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading

AT NIAGARA FALLS, N Y OCT 17 1985 From UMETCO MINERALS CORPORATION

the property described below in apparent good order except as noted (contents and condition of contents of packages unknown) marked consigned and destined as indicated below which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination if on its route otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Official Southern Western and Illinois Freight Classifications in effect on the date hereof if this is a rail or a rail water shipment or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading including those on the back thereof set forth in the classification or tariff which governs the transportation of this shipment and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Consigned to NUCLEAR RESEARCH CORPORATION  
125 TITUS AVENUE

SHIPPER'S ORDER NO.

CUSTOMER'S ORDER NO.

Destination WARRINGTON, PA

State PA

County \_\_\_\_\_

Route RADIOACTIVE SOURCE

Delivering Carrier ATTN PETER HERTSZ

Car or  
Vehicle Initials

No.

Seal  
No.

No Packages	Kind of Package Description of Articles, Special marks and Exceptions	Weight (Sub to correction)	Class or Rate	Check Column	Subject to Section 7 of Conditions of applicable bill of lading if this shipment is to be delivered to the consignee without recourse on the consignor the consignor shall sign the following statement:  The carrier shall not make deliv- ery of this shipment without pay- ment of freight and all other lawful charges.
	BIN LEVELING DEVICE WHICH CONTAINS A RADIOACTIVE SOURCE NOS (2 EACH OF CE137) UN-2982	560#			<p>(Signature of consignor)</p> <p>If charges are to be prepaid write or stamp here To Be Prepaid.</p> <p>PREPAID</p> <p>Received \$ _____</p> <p>to apply in prepayment of the charges on the property described hereon.</p> <p>Agent or Cashier</p> <p>Per _____ (The signature here acknowledges only the amount prepaid)</p> <p>Charges advanced</p>
	THIS MATERIAL PACKED BY THE MANUFACTURER				
	NOTE TO CARRIER				
	Forward duplicate freight bills to UMETCO MINERALS CORPORATION P.O. Box 66 137-47th Street Niagara Falls, N.Y.				

RADIOACTIVE MATERIAL, SPECIAL FORM, NOS, UN2982, UN2982  
SEALED SOURCE, 0.1 CURIES, ISOTOPE CS-137  
RADIOACTIVE YELLOW II LABEL  
TRANSPORT INDEX 0.4, PACKAGE TYPE A

\* If the shipment moves between two ports by a carrier by water or shipper's weight.

† This is to certify that the above articles are properly described by notation according to the regulations prescribed by the Interstate Commerce Commission.

‡ The fibre boxes used for this shipment conform to the specifications in Classification.

§ If the ratings under item 33800 of the Uniform Freight Classification No charge the agreed or declared value of the property for transportation.

¶ Shipper's imprint in lieu of stamp not a part of bill of lading approved.

NOTE—Where the rate is dependent on value shippers are rec

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the U.S. Department of Transportation. This is subject to the limitations prescribed for cargo-only aircraft.

The agreed or declared value of the property is hereby specifically stated

UMETCO MINERALS CORPORATION

BF-1282 (4-23-83)

Shipper

Per CAROL A. U'REN

Permanent postoffice  
address of shipper  
UC 3-75-34

SIGNATURE

Per Smith Transfer

UCCNHT0003469

## SHIPPING MEMORANDUM

ORIGINATING CARRIER

SMITH TRANSFER

FILE NUMBER

DATE SHIPPED

OCT 17, 1985

FOB O/T SHIPPING POINT

Umetco Minerals Corporation



PO BOX 66 137 47th STREET • NIAGARA FALLS NEW YORK 14302

REQUIREMENT CARD NO

CUSTOMER'S ORDER NO

CONSIGNEE TO

RECORD NO

NUCLEAR RESEARCH CORPORATION  
125 TITUS AVENUE  
WARRINGTON, PA 18976

ATTN. PETER HERTSIZ

SHIPPING LOC NO	PRODUCT CODE	SIZE CODE	CONT CODE
615			
CHARGE	SHIPPING STW NO	REC STW NO	MODE OF SHIP

ROUTE

SEAL NO

DEPT SHIPPING  
169 BLDG

GATE NO

DELIVERING CARRIER

VEHICLE INITIALS

NUMBER

NO OF PKGS	BILL OF LADING DESCRIPTION	WEIGHT	CLASS/RATE CHECK	PREPAID STAMP
	BIN LEVELING DEVICE WHICH CONTAINS A RADIOACTIVE SOURCE (2 EACH OF CE137)	560#		PREPAID
				AMOUNT \$

LOT NUMBER	NO OF PKGS	TOTAL WEIGHT IN POUNDS			CHEMICAL ANALYSIS					
		GROSS	TARE	NET						
		560								

PKG NO	INDIVIDUAL WEIGHTS IN POUNDS			PKG NO	INDIVIDUAL WEIGHTS IN POUNDS		
	GROSS	TARE	NET		GROSS	TARE	NET
	PACKED BY THE MANUFACTURER						
	REQUESTED BY D J HANSEN						

RADIOACTIVE MATERIAL, ~~SPECIAL FORM~~, N O S., ~~UN2974~~, UN2982  
SEALED SOURCE, 0.1 CURIES, ISOTOPE CS-137  
RADIOACTIVE VERKHOV II LABEL  
TRANSPORT INDEX 0.4, PACKAGE TYPE A

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the U.S. Department of Transportation. This shipment is within the limitations prescribed for cargo-on-aircraft.

BF-1282 (4-23-83)

SIGNATURE

UCCNHT0003470

# TRANSFER SHEET

- ☐ CONTROL OFFICE
- ☐ RECEIVING DEPT \_\_\_\_\_
- ☐ ORIGINATING DEPT \_\_\_\_\_

PLANT		ID	DATE			CHARGE		REFERENCE	BS LOC	INV ACT
			MONTH	DAY	YEAR					
615		42	10	16	88	25		08910		
1	3	4 - 5	6		11	12	16	17	21	22 24 25 27

CARD COLUMNS 

DESCRIPTION								
DEPT	LOCATION	LOT	PROD CODE	SIZE	PKG	QUANTITY	NO PKGS	WT PER PKG
FROM	145		10-2235	11/22/74		1		
To	69 Building			11/22/74		1		
CARD COLUMNS	29 31	32 35	36 40	41 46	47-49	50-51	52 61	62 66 67 76

## DETAIL

[illegible]



INSTRUMENT COMPANY 7555 N LINDER AVENUE • SKOKIE, ILLINOIS 60077 • 312/647-7866  
TELEX 72-4458

UMETCO MINERAL CORPORATION  
P.O.Box 579  
Niagra Falls, NY 14302  
  
Attn A.M Gonas

December 31, 1985

This is to notify you of the disposal of 1 Alnor  
Dewpointers you sent in.

Dewpointers with the model/serial number 7000U/17340 were  
disposed of on December 27, 1985 in accordance with current  
and prevailing regulations of the Illinois Department of Nuclear  
Safety. All documentation has been filed for any possible  
future reference.

If we can be of any further service, please let us know.

Regards,

ALNOR INSTRUMENT COMPANY

A handwritten signature in cursive script, appearing to read "Raymond Schmidt".

Raymond Schmidt  
Director, Quality Assurance

cc: A.F. Manz  
Sales File

UCCNHT0003472

# Umetco Minerals Corporation



PO BOX 579 4625 ROYAL AVENUE • NIAGARA FALLS NEW YORK 14302

December 6, 1985

Ms Eileen Block  
Alnor Instrument Company  
7555 N. Linder Avenue  
Skokie, IL 60077

Dear Ms Block:

As per our phone conversation of December 3, 1985 I am returning one Alnor Type 7000 Dew Point instrument to your company for disposal. You may dispose of this instrument in any manner consistent with your procedures. Shipment to you will be by U.P.S. Ground Service.

We would request a letter verifying that you did indeed receive the above mentioned instrument and have disposed or otherwise relieved us of ownership of the instrument.

Very truly yours,

A. M. Gonas

AMG/mau

Blind Copies

✓ D. J. Hansen  
T. J. Kagetsu  
D. G. Millenbruch

UCCNHT0003473



Amersham Corporation  
2636 South Clearbrook Drive  
Arlington Heights Illinois 60005 4692  
(312) 593 6300

RECEIVED

JAN 10 1986

**Amersham**

D J HANSEN

January 9, 1986

Mr. Don Henson  
Umetco Minerals Corporation  
137-47th Street  
Niagara Falls, NY 14302

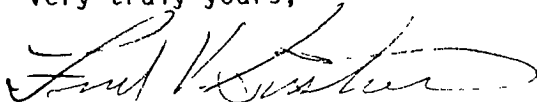
Dear Mr Henson:

The four sources loaded, for disposal on December 6, 1985 have been received  
The sources listed below will be processed in accordance to the applicable NRC  
regulations prior to disposal

Product Code	Isotope	Activity	Serial Number
CUC-234	Cd-109	3mCi	A-962
CTC-3	Co-57	1mCi	C-633
N/A	Fe-55	20mCi	23
PPC-245	Pu-238	30mCi	72223

Please advise if further information is required on the disposition of the  
sources

Very truly yours,



Fred V. Susterich  
Project Engineer  
Industrial Products

FVS/ew

UCCNHT0003474

1149-5428-4

12/10/85

FROM (Your Name)

D. J. Hansen

COMPANY

Umetco Minerals Corporation

STREET ADDRESS

4625 Royal Avenue

CITY

Niagara Falls

STATE

NY

AIRBILL NO

288688713

ZIP ACCURATE ZIP CODE REQUIRED FOR CORRECT INVOICING

1 4 3 0 3

YOUR NOTES/REFERENCE NUMBERS (FIRST 12 CHARACTERS WILL ALSO APPEAR ON INVOICE)

523-20301

PAYMENT ☒ Bill Shipper ☐ Bill Recipient's F.E.C. Acct. ☐ Bill 3rd Party F.E.C. Acct. ☐ Bill Credit Card☐ Cash In Advance

Account Number/Credit Card Number

SERVICES

CHECK ONLY ONE BOX

PRIORITY 1

☐ (OVERNIGHT PACKAGES)  
(Up to 70 LBS)

STANDARD AIR

☒ DELIVERY 2ND BUSINESS  
DAY FOLLOWING PICK-UP  
(Up to 70 LBS)ORMS AND  
RADIOACTIVE  
MATERIAL ONLYOVERNIGHT IS NEXT BUSINESS DAY  
(MONDAY THROUGH FRIDAY) TWO DAYS  
FROM ALASKA-HAWAII SATURDAY DELIV-  
ERY AVAILABLE IN CONTINENTAL U.S.  
SEE SPECIAL HANDLINGDELIVERY AND SPECIAL HANDLING  
CHECK SERVICES REQUIRED☐ FEDERAL EXPRESS LOGISTICS  
IN SERVICE GUIDE GROUP 1'S  
PHONE AIR BLR IS GROUP 1'S2 ☒ DELIVER3 ☐ SATURDAY SERVICE REQUIRED  
See Remarks (Extra charge applies for delivery)4 ☐ RESTRICTED ARTICLES SERVICE (R-1 and  
Standard Air Packages only extra charge)5 ☐ SSS (Signature Security Service  
required extra charge applies)6 ☐ DRY ICE LBS7 ☐ OTHER SPECIAL SERVICE8 ☐9 ☐

PACKAGES WEIGHT DECLARED VALUE OS

1 45# \$5,000

TOTAL TOTAL TOTAL

RECEIVED AT

SHIPPER'S DOOR

☐ REGULAR STOP☐ ON-CALL STOP☐ F.E.C. LOC

Federal Express Corporation Employee No

DATE/TIME For Federal Express Use

TO (Recipient's Name)

Fred Susterick

COMPANY

Amersham Corporation

STREET ADDRESS (P.O. BOX NUMBERS ARE NOT DELIVERABLE)

2636 S. Clearbrook Drive

CITY

Arlington Heights

STATE

IL

IN TENDERING THIS SHIPMENT SHIPPER AGREES THAT  
F.E.C. SHALL NOT BE LIABLE FOR SPECIAL INCIDENT  
TAL OR CONSEQUENTIAL DAMAGES ARISING FROMZIP ACCURATE ZIP CODE REQUIRED  
FOR OVERNIGHT DELIVERY

6 0 0 0 5

CARRIAGE HEREOF F.E.C. DIS-  
CLAIMS ALL WARRANTIES EXPRESS OR IMPLIED WITH  
RESPECT TO THIS SHIPMENT THIS IS A NON-NEGOTIABLE  
AIRBILL SUBJECT TO CONDITIONS OF CONTRACT SET FORTH  
ON REVERSE OF SHIPPER'S COPY UNLESS YOU DECLARE A  
HIGHER VALUE THE LIABILITY OF FEDERAL EXPRESS COR-  
PORATION IS LIMITED TO \$100.00 FEDERAL EXPRESS  
DOES NOT CARRY CARGO LIABILITY INSURANCE

FEDERAL EXPRESS USE

FREIGHT CHARGES

DECLARED VALUE CHARGE

AGT/PRO

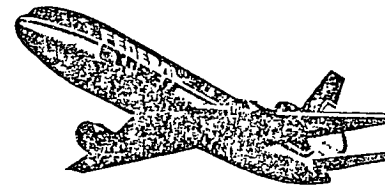
ADVANCE ORIGIN

AGT/PRO

ADVANCE DESTINATION

OTHER

TOTAL CHARGES

PART  
#2041730764  
REVISION DATE  
10/82S  
PRINTED U.S.A.

AIRBILL NUMBER

288688713

SHIPPER'S CERTIFICATION FOR RESTRICTED ARTICLES  
(TYPE OR PRINT)

NO OF PKGS	PROPER SHIPPING NAME (PER 49 CFR 172.101)	CLASSIFICATION	IDENTIFICATION NO	NET QUANTITY PER PACKAGE
1	Radioactive Material CARGO AIRCRAFT ONLY - Radioactive Material	N.O.S.	UN-2982	

ADDITIONAL DESCRIPTION REQUIREMENTS FOR RADIOACTIVE MATERIALS (SEE BACK)	RADIONUCLIDE	FORM	ACTIVITY	CATEGORY OF LABELS	TRANS INDEX	PACKAGE IDENTIFICATION
	PU-238	Solid-Pellet	30 mCi	Yellow II	1.0	Type B
	Cd-109	Solid-Pellet	3 mCi	" "	"	"
	Fe-55	Solid-Pellet	20 mCi	" "	"	"
	Co-57	Solid-Pellet	1 mCi	" "	"	"

THIS SHIPMENT IS WITHIN THE LIMITATIONS PRESCRIBED FOR

~~PASSENGER AIRCRAFT~~CARGO  
AIRCRAFT ONLY

(DELETE NONAPPLICABLE)

IF ACCEPTABLE FOR PASSENGER AIRCRAFT, THIS SHIPMENT CONTAINS RADIOACTIVE MATERIAL INTENDED FOR USE IN, OR INCIDENT TO RESEARCH, MEDICAL DIAGNOSIS OR TREATMENT

I HEREBY CERTIFY THAT THE CONTENTS OF THIS CONSIGNMENT ARE FULLY AND ACCURATELY DESCRIBED ABOVE BY PROPER SHIPPING NAME AND ARE CLASSIFIED, PACKED, MARKED, AND LABELED, AND IN PROPER CONDITION FOR CARRIAGE BY AIR ACCORDING TO APPLICABLE NATIONAL GOVERNMENTAL REGULATIONS

NAME AND TITLE OF PERSON SIGNING CERTIFICATION

EMERGENCY TELEPHONE NO

SIGNATURE OF SHIPPER

Albert M. Jones Tech.

716-278-5373

Albert M. Jones

Contract No. N-85-060

~~ATTACHMENT 1~~

Description of services to be provided by CNSI at Union Carbide's UMETCO Facility, Niagara Falls, New York.

1. CNSI will provide services as described in Item I, Scope, for the following materials:
  - a. Approx. 1/2 lb Thorium Oxide Powder  
4.5 mr/hr  
Est .0499 mci
  - b. Approx. 2 lbs Thorium Nitrate Powder  
3.0 mr/hr  
Est .199 mci
  - c. Approx. 1 lb Thorium Chloride Powder  
2.5 mr/hr  
Est .099 mci
  - d. (4) 3 1/2" x 1 3/4" crucibles (fused Thorium Oxide)
  - e. (1) Alphatron Gauge, 5" x 1 1/4", open on one end  
50 mr/hr @ 10 cm from opening  
Est 1.5 nci/gm (700 lbs cement)
  - f. 3" x 4" x 1/4" envelope containing radium  
20 mr/hr surface, 3.5 mr/hr @ 10 cm  
Est 1.322 nci/gm (700 lbs cement)
2. CNSI will perform services in two (2) eight hour days.

US Ecology Inc  
P O Box 638  
Richland Washington 99352  
509/377 2411

14,347  
14,347

CHEM-NUCLEAR SYSTEMS INC.  
220 STONERIDGE DRIVE  
COLUMBIA SC 29210

MAILED

JAN 24 1986

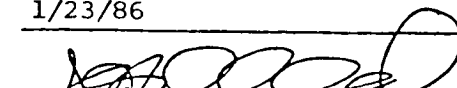
RECEIVED

FEB 7 1986

**USEcology**

FILE D. J. HANSEN

This is to certify that the waste described below was received for disposal at the US Ecology Richland, Washington Low-Level Radioactive Waste Disposal Facility. This certification satisfies Conditions 31(a) and 31(b) (Acknowledgment of Receipt of Waste) of the State of Washington Radioactive Materials License WN-1019-2 issued to US Ecology, Inc.

BATES NUMBER 14347  
GENERATOR NUMBER NYR-99-002-2642  
MANIFEST NUMBER 55808  
SHIPMENT NUMBER UMC-1-85  
DATE RECEIVED 1/23/86  
SIGNATURE 

DATE 1/23/86

Discrepancies (if any) between wastes listed on the manifest and waste materials received in the shipment:

none

NOTE: Any inquiries to this acknowledgment should be directed to Mike Nolan, Facility Radiation Safety Officer.

UCCNHT0003477



DEPARTMENT OF SOCIAL AND HEALTH SERVICES  
OLYMPIA, WASHINGTON

LOW-LEVEL RADIOACTIVE WASTE SHIPMENT CERTIFICATION FOR  
COMMERCIAL GENERATOR/PACKAGERS, AND BROKERS AND CARRIERS

The following certification, completed as applicable, is made to the State of Washington

Certification is hereby made to the State of Washington that Radiation Shipment Record No Umc-1-85 of low-level radioactive waste has been inspected in accordance with requirements of the Governor of Washington's Executive Order dated November 19, 1979, prior to its shipment. Further certification is made that the inspection has revealed no items of non-compliance with all applicable laws, rules and regulations.

The undersigned shall indemnify and hold harmless the State of Washington, in an amount not to exceed \$1,000,000.00 per individual who may be injured, provided that indemnification shall not exceed \$5,000,000.00 in total, for each occurrence, from any and all claims, suits, losses, damage, injury and expenses to any person whomsoever or to property arising or growing out of or in any manner connected with the activities performed under this order.

Except for any violation of applicable existing state or federal statute or regulation respecting packaging and shipment, inspection and acceptance of any item, or container or material covered by this certification by the State of Washington or a duly authorized contractor shall release the party who executed this certificate from any and all requirement of indemnification from injury or loss.

SECTION A

FOR THE GENERATOR/PACKAGER

UMETCO MINERALS CORP

(Company Name)

PERMIT NUMBER

8-1168

VOLUME OF WASTE IN THIS SHIPMENT

40 ft<sup>3</sup>

DATE

12/31/85

BY

Ronald J. Hansen

TITLE ASSISTANT DIRECTOR CHEMICAL SCIENCE TECHNOLOGY DEPT

SECTION B

FOR THE BROKER

Chem-Nuclear Systems Inc

(Company Name)

PERMIT NUMBER

2000

VOLUME OF WASTE IN THIS SHIPMENT

4.0 ft<sup>3</sup>

DATE

12/31/85

BY

John A. Bender

TITLE

BROKER

SECTION C

FOR THE CARRIER

CONSOLIDATED FREIGHTWAYS

(Company Name)

VOLUME OF WASTE IN THIS SHIPMENT

4.0 ft<sup>3</sup>

DATE

12/31/85

BY

W. E. [Signature] 12/31/85

TITLE

DRIVER

**CHEM-NUCLEAR SYSTEMS INC**

P.O. Box 726 • Barnwell South Carolina 29812 • (803) 259-1781

*Bill Freight Charges to***STRAIGHT BILL OF LADING — SHORT FORM — ORIGINAL — NOT NEGOTIABLE**  
RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading

The property described below in apparent good order except as noted (contents and condition of contents of packages unknown) Marked, consigned and destined as indicated below which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination. If on its route otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination. And as to each party at any time interested in all or any of said property that every service to be performed hereunder shall be subject to all the terms and conditions of the uniform domestic straight bill of lading set forth (1) in official Southern Western and Illinois Freight Classifications in effect on the date hereof if this is a rail or a rail water shipment. Or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading including those on the back thereof set forth in the classification or tariff which governs the transportation of this shipment and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

(MAIL OR STREET ADDRESS OF CONSIGNEE — FOR PURPOSES OF NOTIFICATION ONLY)

FROM UMETCO MINERALS CORP. Date 12/31/85At 4625 ROYAL AVE NIAGARA FALLS NY 14302CONSIGNEE TO U.S. ECOLOGYDESTINATION HANFORD Reservation STATE WA COUNTY Richland99352

Control Number

85-365-2

Tractor No

N/A

Trailer No

N/A

LENGTH

LEGAL

HEIGHT

LEGAL

WIDTH

LEGAL

NO PKGS	HM	KIND OF PACKAGE DESCRIPTION OF ARTICLES LINER NUMBERS SPECIAL MARKS & EXCEPTIONS	*WEIGHT (Sub to Correction)
1	X	RADIOACTIVE MATERIAL, N.O.S. UN 2982 Activity - 1.27 mCi. Isotopes - $Th^{232}$ $Ra^{226}$ Physical Form - SOLID Chemical Form - OXIDES, NITRATE AND RADIUM METAL. LABELED - "RADIOACTIVE YELLOW II" TRANSPORT INDEX - 0.2. NO PLACARDS REQ'D. CONTAINER - (1) 30 GAL DOT 7A TYPE A DRUM. NON-EXCLUSIVE USE SHIPMENT	500
Bill FREIGHT CHARGES to Chem-Nuclear Sys INC			
ACCOUNTS PAYABLE. (ADDRESS AT TOP of BILL)			

IMPORTANT This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Signature

Company

X Donald J. Hansen  
UMETCO Date 12/31/85

Received the property described above in good condition except as otherwise noted.

Carrier

Driver

Date and Time

Consolidated Freightways  
X W. R. P. P. P.  
12/31/85 1200

SCHEDULED TO ARRIVE	DATE	TIME	COMPLETED LOADING	DATE	TIME	SHIPPER'S SIGNATURE
	<u>12-31-85</u>	<u>1000</u> AM PM		<u>12-31-85</u>	<u>1230</u> AM PM	<u>Donald J. Hansen</u>
ARRIVED AT SHIPPER	DATE	TIME	LEFT SHIPPER	DATE	TIME	SHIPPER'S SIGNATURE
	<u>12-31-85</u>	<u>1200</u> AM PM		<u>12-31-85</u>	<u>1245</u> AM PM	<u>Donald J. Hansen</u>

SHIPPER IMPORTANT NOTE Your signature certifies that the above dates and times are correct for record keeping and billing purposes

Send all kits and requests to

SUNTRAC SERVICES, INC

P O Box 57722

Webster, Texas 77598-0722

Phone: (713) 326-2346

ATTN SIT-KIT

CAUTION Conduct a survey of the outside of each package placed in the U S Mails  
Any reading over 0.5 mr/hr at contact with envelope or package shall not  
be mailed.

LEAK TEST INVENTORY/REPORT FORM

Company Name Union Carbide Umetco Div  
Rm Hammer Ethem Metals Co  
Address Po Box 1344 City Niagara Falls State NY Zip 14302  
ISOTOPE Cs-137 ACTIVITY 50 mCi  
IDENT./SERIAL NO CS-2225 (stock) LEAK TEST DATE 6-27-85  
CS-2243 (storage)  
SMEAR TAKEN BY Robert M Hammer - Ethem Metals Company

DO NOT WRITE BELOW THIS LINE

This is to certify that the above described smear has been assayed at our facilities for  
indication of source leakage

Our findings show the leakage to be

ALPHA	BETA-GAMMA
—	1.0001

uCi (Wet)

Certified by C.E. McIntyre  
(Suntrac Services, Inc Representative)

Date 7/1/85

SSI-02  
Rev 0  
6/23/81

UCCNHT0003480

Send all kits and requests to

SUNTRAC SERVICES, INC

P. O. Box 57722

Webster, Texas 77598-0722

Phone: (713) 328-2348

ATTN SIT-KIT

CAUTION Conduct a survey of the outside of each package placed in the U.S. Mails  
Any reading over 0.5 mr/hr at contact with envelope or package shall not  
be mailed.

LEAK TEST INVENTORY/REPORT FORM

Company Name UNION Carbide, U.M.T.C. D.V.  
A.M. Hammer - El Paso Metals Co  
Address P.O. Box 1344 City Newport Falls State Ala Zip 14309  
ISOTOPE Pu 233, Co 57, Fe 55, Cd 109 ACTIVITY 30mCi, 1mCi, 30m, 3mCi  
IDENT /SERIAL NO 7222/3, C-633, 73, A-763 LEAK TEST DATE 6-27-85  
SMEAR TAKEN BY Robert M. Hammer - El Paso Metals Company

DO NOT WRITE BELOW THIS LINE

This is to certify that the above described smear has been assayed at our facilities for  
indication of source leakage.

Our findings show the leakage to be

ALPHA	BETA-GAMMA
4.0001	4.0001

uCi (Wet)

Certified by C.E. Minter  
(Suntrac Services, Inc Representative)

Date 7/1/85

SSI-02  
Rev 0  
6/23/81

UCCNHT0003481





## Elkem Metals Company

Technology Center  
4625 Royal Avenue, P.O. Box 1344 Niagara Falls NY 14302  
☎ (716) 286-7400  
Telex II 710-524-1664

RECEIVED

FEB - 6 1986

D. J. HANSEN

~~FILE~~

February 4, 1986

Dr. Donald J. Hansen  
Assistant Director - Chemical Science  
Technology Department  
Umetco Minerals Corporation  
P. O. Box 579  
Niagara Falls, NY 14302

Dear Dr. Hansen:

Upon your request, a test was conducted on February 3, 1986 to determine if any residual radiation was left in a cabinet previously used to store radioactive sources and chemicals. No radiation above background was noted. This cabinet is located in Building 166, Room 367, 4625 Royal Avenue, Niagara Falls, New York, which is presently occupied by Elkem Metals Company.

Very truly yours,

R. M. Hamner  
Acting Radiation Officer

RMH1/LAB

UCCNHT0003482